



PATENT APPLICATION
ATTORNEY DOCKET NO. Q46699

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

1-3

In re application of

Hisashi YAMAGISHI, et al.

Appln. No.: 09/129,883

Group Art Unit: 3711

Confirmation No.: Not Yet Assigned

Examiner: S. Blau

Filed: August 6, 1998

For: MULTI-PIECE SOLID GOLF BALL

REPLY BRIEF PURSUANT TO 37 C.F.R. § 1.193(b)

Commissioner for Patents
Washington, D.C. 20231

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Sir:

In accordance with the provisions of 37 C.F.R. § 1.193(b), Appellants respectfully submit this Reply Brief to address points raised by the Examiner's Answer of September 25, 2001.

Entry of this Reply Brief is respectfully requested.

Claims 3-15

The Examiner's Answer states a conclusion, that it would have been obvious to modify Yamagishi et al. (U.S. Patent No. 5,695,413)(hereinafter Yamagishi '413) in view of Yamagishi et al. (U.S. Patent No. 5,779,563)(hereinafter Yamagishi '563), without providing any underlying reasoning, as clearly required. At bottom, the Examiner's basis for this unsubstantiated and erroneous conclusion is that the prior art teaches multi-piece golf balls, golf balls have dimples, and thus nothing more is required. The Examiner has reduced the Appellants' invention to nothing more than a simple collection of diverse base components, and then has attempted to

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find those base components individually within the cited prior art. In reality, the Examiner's argument is an impermissible hindsight reconstruction of the golf balls disclosed by Yamagishi '413 and Yamagishi '563 to add features neither disclosed or in any way suggested. Critically, while neither Yamagishi '413 and Yamagishi '563 teach or suggest various features of the Appellants' invention, the Examiner continues to assert the rejection absent any teaching, suggestion or reason arising from the prior art itself. The flaws in the Examiner's position can be summarized as follows:

[1] As noted in Appellants' Brief at pages 10-11, the first critical defect in the Examiner's rejection is the absolute lack of teaching in Yamagishi '413 disclosing the product of Shore D hardness of cover outer layer and cover inner layer. Appellants acknowledge that Shore D hardness values of the cover inner layer and cover outer layer of a multi-piece golf ball will in fact exist, that is, the cover material will have some measurable hardness under the Shore D scale. That alone falls well short of the particular use of those values either alone, or as here as multipliers. The prior art contains no such recognition. Judge Lourie, speaking for the Federal Circuit in *In re Rijchaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993) stated that the "mere fact that a certain thing may result from a given set of circumstances is not sufficient [to establish inherency.]" *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981) (citations omitted) (emphasis added). "That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown." *In re Spormann*, 363 F.2d 444, 448, 150 USPQ 449, 452 (CCPA 1966). Such a retrospective view of inherency is not a substitute for

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some teaching or suggestion supporting an obviousness rejection. *See In re Newell*, 891 F.2d 899, 901, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989). There is simply no teaching or suggestion in Yamagishi '413 that the hardness of the layers can be combined in any manner to define a usable physical parameter for the golf ball. Yamagishi '413 is totally silent regarding multiplying the Shore D hardness of cover outer layer and cover inner layer, and using the product to define a characteristic of a golf ball.

[2] The second defect in the Examiner's rejection of claims 3-15 is the lack of any teaching in the combination of Yamagishi '413 and Yamagishi '563 of the relationship between the product of Shore D hardness of the cover outer layer and the cover inner layer and **any** other characteristic of the golf ball. Obviously, a myriad of different parameters could be envisioned, thickness of layers, overall compression of the ball and the like, none of which is in any way recognized in the prior art. Here, the comparative physical characteristic is totally removed from the materials themselves, but rather to the dimple volume, dealing with aerodynamics of the dimple pattern. It is the proportion of dimples V_R (%). Appellants respectfully point out that the Examiner's statement that the "claims do not require a golf ball to vary the value of V_R to be [sic] with the required relationship to the product of hardness", cannot be squared with the claimed language. *See* pages 10-11 of the Examiner's Answer, numbered paragraph 16. A plain reading of claim 4 (pertinent portion reproduced below) reveals otherwise (emphasis added):

a product of the Shore D hardness of said inner cover layer multiplied by the Shore D hardness of said outer cover layer and a proportion V_R (%) of the total of the volumes of dimple spaces each defined below a plane circumscribed by the dimple edge to

the overall volume of a phantom sphere given on the assumption that the golf ball surface is free of dimples *satisfy any one of the following combinations (1) to (5)*:

(1) the product of Shore D hardnesses of inner and outer cover layers: 1,500 to less than 2,000

V_R : 0.8 to 0.93%

(2) the product of Shore D hardnesses of inner and outer cover layers: 2,000 to less than 2,500

V_R : 0.75 to 1.05%

(3) the product of Shore D hardnesses of inner and outer cover layers: 2,500 to less than 3,000

V_R : .7 to 1%

(4) the product of Shore D hardnesses of inner and outer cover layers: 3,000 to less than 3,500

V_R : 0.65 to 0.95%

(5) the product of Shore D hardnesses of inner and outer cover layers: 3,500 to 4,000

V_R : 0.6 to 0.9%,

Appellants believe that the five different conditions specify exactly what the Examiner incorrectly holds is not present in the claims. Certainly, it is acknowledged that golf balls would have dimples; otherwise, a golf ball that was perfectly round and devoid of dimples could not achieve certain desirable flight characteristics. But the mere presence of dimples (which can vary greatly in size and volume) does not all at define values of V_R . The prior art itself as cited by the Examiner for the definition of V_R amply demonstrates that merely showing dimples does not provide enough data to define V_R for a pattern. The references do not provide anything meaningful in terms of ranges of V_R as claimed.

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[3] Given those fundamental shortcomings, the Examiner can point to nothing in the combination of Yamagishi '413 and Yamagishi '563 that discloses the fundamental recognition of using a combination of a particular range of V_R with a particular range of the product of Shore D hardness of the cover inner and cover outer layers. That is, the ultimate combination reached by the Examiner but the input conditions for both Shore D multiplied, V_R ranges are lacking in the prior art. And most importantly, even if the prior art disclosed those two parameters, there is absolutely nothing at all that links them together.

Whether a motivation to combine prior art references has been demonstrated is a question of fact. *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1348 53 U.S.P.Q.2d 1580, 1586 (Fed. Cir. 2000). In making such determination the law some teaching, suggestion or reason coming from the prior art itself, otherwise, the conclusion to be reached is that the motivation is predicated on hindsight. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F. 3d 1573, 1579, 42 U.S.P.Q.2d 1378, 1383 (Fed. Cir. 1997).

There must be some showing of the obviousness of the claim as a whole, not the discrete parts to establish *prima facie* obviousness. When the art in question, as is the case here, is relatively simple, the opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously. *See In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999), *limited on other grounds by In re Gartside*, 203 F.3d 1305, 53 U.S.P.Q.2d 1769 (2000). The same principle applies here because Examiner's analysis is backward to achieve the end point already defined - the claims on appeal.

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Prima facie obviousness is a legal requirement and the burden is on the Examiner to demonstrate using only objective evidence or suggestion from the applied prior art, such that one of ordinary skill would have been lead to the claimed invention as a whole without recourse to Appellants' disclosure. See *In re Oetiker*, 977 F.2d 1443, 1447-48, 24 U.S.P.Q.2d 1443, 1446-47 (Fed. Cir. 1992); *In re Fine* 837 F.2d 1071, 1074-75, 5 U.S.P.Q.2d 1596, 1598-1600 (Fed. Cir. 1988). As a matter of law then, it is the burden of the Examiner to demonstrate that the prior art, and not Appellants' disclosure, would lead the hypothetical artisan to the claimed invention as a whole. What the Examiner has done, and as plainly apparent in the statement of rejection, is to dissect the claim into discrete components and then to apply individual pieces of prior art. That is the hallmark of hindsight and not the characteristic of obviousness.

The Examiner's analysis is nothing more than a classic hindsight reconstruction where the claimed invention is debased and trivialized because in retrospect, the Examiner can find the dispirit elements, uniquely combined, existing in individual basis in a number of prior art references. Such a hindsight construction has been universally condemned. The Federal Circuit has been unwavering in its condemnation of hindsight logic. Typical, is the decision in *Grain Processing Corp. v. American Maize-Products Co.*, 840 F.2d 902, 907(Fed. Cir. 1988) wherein Judge Mayer for the Federal Circuit stated,

Care must be taken to avoid hindsight reconstruction using the patent in suit as a guide through the maze of prior art references combining the right references in the right way so as to achieve the result of the claims in suit.

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More recently, Judge Clevenger speaking for the Court on the same issue in *McGinley v. Franklin Sports, Inc.*, 60 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 2001) stated,

The genius of invention is often a combination of known elements which in hindsight seems preordained. To prevent hindsight invalidation of patent claims, the law requires some “teaching, suggestion, or reason” to combine cited references.

Same here, there is no rhyme or reason why the references cited and applied by the Examiner would stand out from the maze of prior art. Those references stand for individual consideration but, but also for the myopic dissection, one perspective view at a time, which is the result of the Examiner’s logic and analysis. The approach fails to heed the injunction for guarding against falling victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. *Id.* at 1008. Here, the Examiner cannot even point to any teaching or suggestion in the combination of Yamagishi ‘413 and Yamagishi ‘563 that discloses the dimple V_R coupled with the product of Shore D hardness of the cover inner and cover outer layers. Clearly, the Examiner’s methodology is nothing more than what has been rejected as the clear application of hindsight thus mandating reversal of the rejection.

Claim 16

Not surprisingly, the Examiner repeats the same flawed rejection to claim 16 over Hayashi et al. (U.S. Patent No. 5,816,942)(hereinafter Hayashi ‘942) in view of Yamagishi ‘563. As noted above and as discussed at length in Appellants’ Brief on Appeal at pages 10-15,

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Appellants' invention recites a clear relationship between dimple V_R and the product of the Shore D hardness values for the cover inner layer and the cover outer layer, such that for each range of the product of the Shore D hardness values for the cover inner layer and the cover outer layer, a corresponding range of V_R is thus also set.


If the combination of Hayashi '942 and Yamagishi '563 had any notion of a relationship between product of the Shore D hardness values of the cover inner layer and the cover outer layer and the dimple configuration, one would expect that such a notion would be easily recognizable, or at least identified in some manner. No such recognition exists, however, and the Examiner's hindsight analysis cannot overcome the lack of objective teaching missing from the combination of Hayashi '942 and Yamagishi '563. As such, Appellants' contend the Examiner's reliance on the combination of Hayashi '942 and Yamagishi '563 is unsupportable and that no *prima facie* obviousness exists.

For the above reasons as well as the reasons set forth in Appellants' Brief on Appeal, Appellants respectfully request that the Board reverse the Examiner's rejections of all claims on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

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**Submitted herewith is a Request for Oral Hearing along with a check for the
statutorily required fee.** Please charge any deficiencies in the fee, or credit any overpayments
thereof, to our Deposit Account No. 19-4880.

Respectfully submitted,


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